2020 ANNUAL REPORT

Traffic Engineering
Transportation Management
Transportation Engineering
Stormwater Engineering
Construction Inspection
Street Operations
General Services

CITY OF Springfield
PUBLIC WORKS

"In 2020, more than ever, citizens relied on our roadways and sidewalks to access essential services. They expected our infrastructure to be ready to support the economy as it gets moving again. They also looked to upcoming projects as a vision of hope for the future. "

Dan Smith
Director
Springfield Public Works

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Kirk Juranas, P.E.
Assistant Director
OPERATIONS

Martin Gugel, P.E.
Assistant Director
ENGINEERING

NOTE FROM THE DIRECTOR

A year like no other.

This past year was a year like no other for the Department of Public Works. Navigating the pandemic while maintaining services vital to the community was a phenomenal challenge to say the very least.

In 2020, more than ever, citizens relied on our roadways and sidewalks to access essential services. They expected our infrastructure to be ready to support the economy as it gets moving again. They also looked to upcoming projects like the Grant Avenue Parkway, Renew Jordan Creek and others as a vision of hope for the future.

While 2020 was a year full of unknowns and significant concerns, it also revealed Public Works' ability to pivot operations in many ways. Public Works learned new technologies daily for the safety of staff and continuity of services during the pandemic. Staff also took advantage of lower traffic on City streets; the reduction in traffic in Spring of 2020 afforded our crews and contractors a unique opportunity to conduct roadway maintenance faster, safer, and with far less impact to businesses and the traveling public. Specifically, 12 lane miles of pavement were rehabilitated in downtown Springfield and surrounding roadways.

We dedicate this annual report to an extraordinary group of professionals who dedicate their lives to providing services often taken for granted. They demonstrated resilience in the face of challenges we've never seen and proved in 2020, a year like no other, that they can and will rise to the occasion, ready to respond and serve.

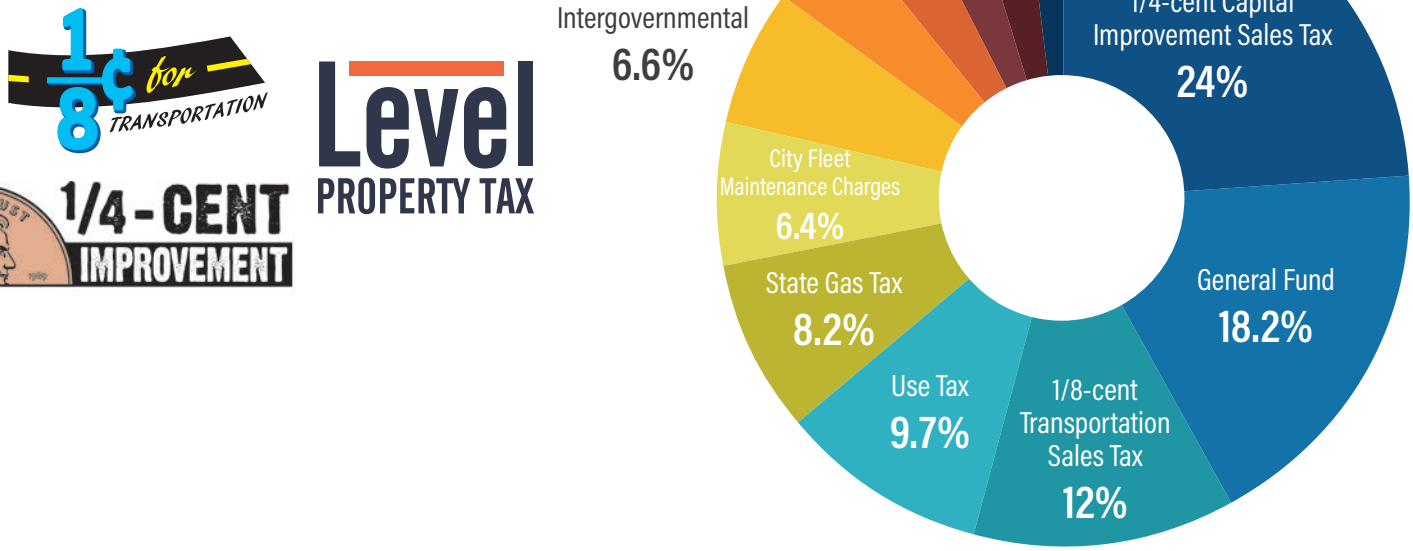
Dan Smith

DAN SMITH, P.E.
DIRECTOR

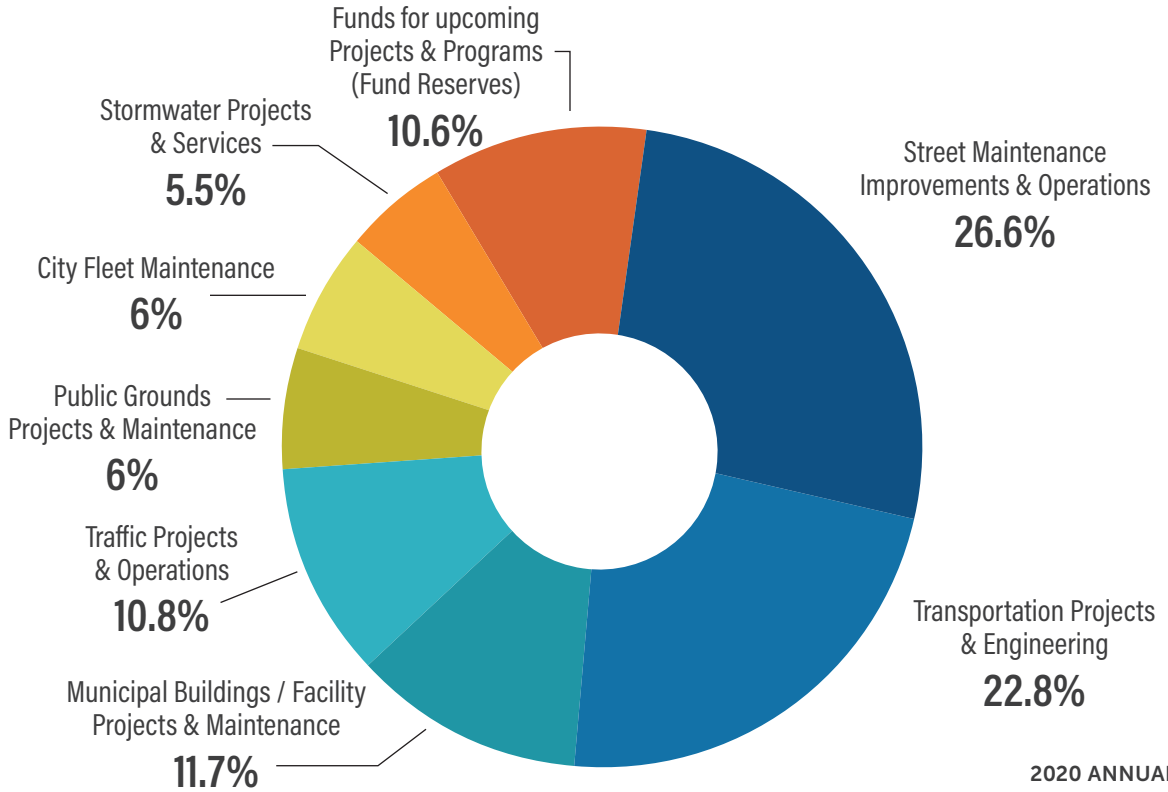
2020 BUDGET BREAKDOWN

FUNDING SOURCES - FY2020 All Funds - $50,317,810

Public Works receives funding from a variety of sources including the voter-approved 1/4-cent Capital Improvement and 1/8-cent Transportation Sales Taxes and the Level Property Tax.



FUNDING USES - FY2020 All Funds - $50,317,810



A YEAR LIKE NO OTHER...

PUBLIC WORKS COVID-19 PANDEMIC RESPONSE

In 2020, changes and challenges were a regular theme. Through it all, Public Works divisions exercised flexibility and ingenuity to continue to provide a high level of service and respond to the needs of the community as it worked through the challenges of the COVID-19 pandemic.

Employees quickly became familiar with Zoom, Teams and other virtual software to facilitate meetings and continue productivity while maintaining safe distances. Work crews modified work schedules to limit employee contact and shifted work to accomodate for shortness in staffing due to sickness or quarantine. Supply chains for a variety of materials were also impacted by the pandemic and finding materials became a challenge. Staff had to work closely with vendors and partners to find supplies to keep projects and maintenance moving.

Throughout it all, divisions worked hard to continue a high level of customer service and maintain critical operations to keep the City functioning efficiently and safely.

MODIFICATIONS TO CITY FACILITIES

The Facilities Maintenance division was kept busy designing, building and installing numerous cough/sneeze guards within various City facilities including the Busch Municipal Building, Historic City Hall City Council Chambers, Municipal Court, and the Hazelwood Cemetery office.

This work group also ordered and installed portable hand sanitizers and updated soap dispensers within multiple City facilities so employees could continue with handwashing recommendations.

The custodial workforce continues daily and weekly with sanitizing work surfaces along with using a fogging atomizer with concentrated disinfectant within all common areas of buildings.

PUBLIC ENGAGEMENT

Public Works relies on input from the public as they work through the design phase of improvement projects. Public Works teamed up with the Department of Public Information and Civic Engagement to quickly shift from hosting in-person open house style events, to utilizing fully virtual education and engagement methods on a variety of projects. Incorporating interactive websites, polling software, social media, virtual conferencing technology and livestream broadcasts, the City actually experienced an increase in public engagement during the pandemic. Average participation went from double digit numbers at in-person events to triple digits as residents seemed to appreciate the convenience of participating at home and on their own timeline. Engagement for projects such as the Grant Avenue Parkway, Cherry and Pickwick Traffic Calming, Fassnight Creek Stormwater Improvements and more, continued full steam ahead through their design and public outreach phases.

TRAFFIC DATA ANALYSIS & RESPONSE

The Transportation Management Division (TMC) has tracked vehicle travel times for years. Many months prior to the COVID-19 pandemic, staff were working on a system for reporting daily traffic volumes measured at locations throughout the city.

This reporting system proved useful in helping evaluate the effectiveness of COVID response strategies in our community. TMC staff began compiling daily traffic count and WiFi sensor data and providing it to the Health Department and Public Information.

The data indicated an overall decrease in traffic throughout the city beginning on Friday, March 13, showing a 9% reduction that day compared to normal conditions. Saturday, March 14 through Wednesday, March 25 showed an average reduction of 30%. After the City's Stay-at-Home order went into effect on Thursday, March 26, there was an average reduction of over 40% on weekdays and about 50% on weekends that continued through the month of April.

With the significant decrease in traffic volumes, TMC staff adjusted traffic signal timing plans accordingly with morning, noon, evening and weekend peak period plans replaced with lower cycle length plans to reduce delay. As traffic volumes began to increase over time, engineers made further adjustments as needed. Morning, evening, and weekend timeframes continued to show significantly reduced traffic volumes throughout the summer. It wasn't until August 2020 that traffic data suggested signal operations should be reprogrammed as prior to the pandemic.

Even into late 2020, the Transportation Management Division still measured a 15% decrease in morning traffic and a 5-10% decrease in evening, night, and weekend traffic.

One of the benefits of lower traffic volumes was a corresponding decrease in the number of crashes and other traffic-related incidents on our roadways. While there was a 14% decrease in total annual incidents compared to 2019, a month-by-month comparison shows a much more substantial reduction including over 30% decrease in April compared to the previous year.

GRANT AVENUE PARKWAY PROJECT PROGRESSES THROUGH PRELIMINARY CONCEPT DESIGN PHASE

In 2020, the City progressed through the public visioning and concept development phases for the Grant Avenue Parkway project – working alongside the community to develop a vision and goals for the project and to determine traffic calming and infrastructure design elements that could be included in the Parkway.

Funded primarily by a $21 million federal Better Utilizing Investment to Leverage Development (BUILD) grant, the Grant Avenue Parkway will provide major transportation improvements along Grant Avenue in the heart of Springfield.

The Parkway will start at Sunshine Street and end in a loop downtown via College Street, Boonville Avenue, Mill Street and Main Avenue. The route is envisioned to include bike and pedestrian friendly facilities, various traffic-calming improvements, bridge enhancements, utility upgrades, fiber optic connectivity and additional crossing and intersection improvements.

In September, the community at large and residents of the West Central Neighborhood Alliance, Fassnight neighborhood and downtown Springfield shared their

vision for the future of the project in four virtual public engagement sessions and a community input survey.

Input from the visioning phase was then used to develop a series of preliminary design concepts. More than 250 viewers tuned in as the City and project consultant CMT presented these preliminary concepts during a virtual public event hosted in November. Participating residents and stakeholders were

presented four basic design options, with more than 200 individuals providing input through live polling exercises and a follow-up survey.

"The options presented were very basic mockups of possible project features. We wanted to hear what participants liked and what they didn't like about each option," explains Public Works Project Manager Leree Reese. "This feedback will help guide us toward the public's primary goals and preferred direction for the project."

The City's project team continued to gather input on first-draft concepts through a series of one-on-one stakeholder input sessions scheduled through January 2021.

In early February 2021, the City's project team presented a second draft of design concepts for additional public feedback.

"At the end of the concept development process, we will provide a baseline concept design to design-build teams, allowing them to innovate and develop unique final designs based on the public's direction," says Reese.

The project team anticipates putting out a request for qualifications in April, 2021 with a request for proposals going out in June, 2021. A final Design/Build Team is expected to be chosen by August. Construction on the project is anticipated to begin in 2022 with completion required by 2026.

To learn more, visit the project website at grantavenueparkway.com.

TRAFFIC ENGINEERING

Traffic Engineering is responsible for traffic planning and design, signs and markings installation, bicycle facilities, pedestrian, bicycle and vehicular safety and development review. In 2020, Traffic Operations was renamed "Traffic Engineering" to better represent the task of the work group.

Development Review and Permitting

Traffic Engineering is responsible for much of the private development review for Public Works. The division works through planning reviews, access and driveway issues, predevelopment reviews and issues driveway, excavation, sidewalk and other permits for Public Works. In late 2020, the workgroup began a detailed review of internal processes and communication to help better facilitate and streamline the development review process related to Public Works. A Microsoft Teams site was created internally to help staff facilitate communication and track key measures. The group began creating a public improvement guide to assist plan preparers.

In 2020, Transportation Engineering was involved with issuing or reviewing the following:

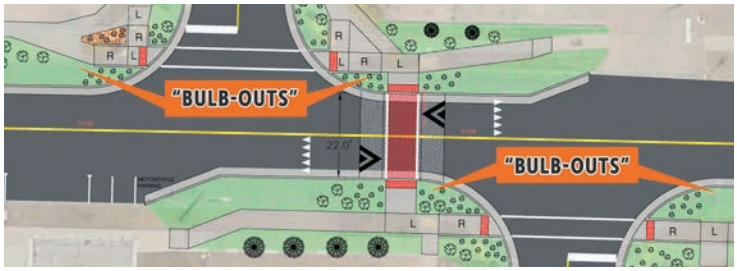
- 1,155 excavation permits
- 173 driveway permits
- 40 sidewalk permits
- 344 pre-development reviews
- 275 planning cases.
- A significant amount of traffic control plan reviews, encroachment permits and other right-of-way permits.
- A large number of private project (PRJ) reviews.

School Sidewalk Program

The school and new sidewalk funding program through the 1/4-cent Captal Improvement Sales Tax continued improving and providing connections for pedestrians throughout the community in 2020. The program was impacted by a contractor workforce shortage due to the pandemic but still was able to provide over $230,000 of new sidewalk in 2020 around the City. Also, through the City's Neighborhood Works grant program, staff were able to construct 1,670 linear feet of new sidewalk near Watkins Elementary for the Doling Neighborhood and 3,880 linear feet of new sidewalk near Delaware Elementary for the Delaware neighborhood.

Commercial Street Tax Increment Financing Projects

Traffic Engineering staff assisted in the construction of two pedestrian alleyways and the public parking lot at Blaine Street and Jefferson Avenue. Construction was completed in 2020 and coordination continues with C-Street to provide more aesthetic and pedestrian features such as planters and benches adjacent to the new walkways.



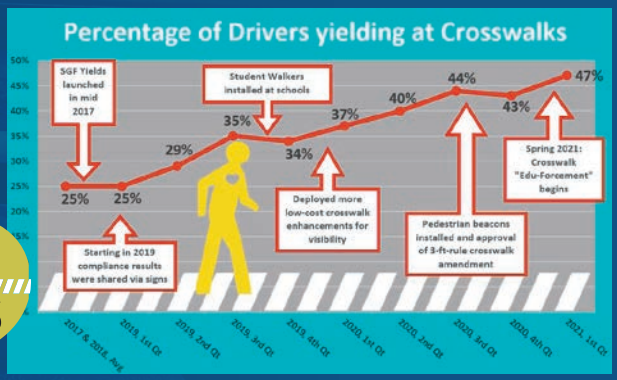
Cherry and Pickwick Traffic Calming and Intersection Improvements

Design was completed for a project to provide pedestrian and traffic calming/safety improvements on Cherry Street from Fremont Avenue to Weller Avenue. This project will include "bulb-outs" and raised crosswalks to slow drivers and enhance pedestrian safety. Construction is scheduled for fall 2021.

Central Street and Boonville Avenue Employee Parking lot

Traffic Engineering assisted in the design and management of the employee parking lot located at Central Street and Boonville Avenue. Including the sidewalk along Central Street and Boonville Avenue with a new crosswalk to the Busch Municipal Building.

PEDESTRIAN SAFETY EFFORTS CONTINUE PROGRESS IN 2020



New "3-foot rule," other code amendments increase protections for pedestrians

In early November 2020, City Council approved three amendments to different sections in Chapter 106 "Traffic and Vehicles" which all aim to make our city safer for pedestrians.

The first amendment allows pedestrians to remain on the sidewalk while requiring vehicles to yield the right-of-way to a pedestrian approaching or waiting within three feet of an unsignalized crosswalk.

Previous City Code reflected state law which does not require a driver to yield unless the pedestrian is already in the roadway. This language can be problematic for vulnerable road users such as children and the elderly. The addition allows a pedestrian to remain within the safety of sidewalk and places more responsibility on the driver to slow or stop for them.

The "three feet" stipulation was included to reduce driver confusion of whether a pedestrian is actually planning to cross. When a person is waiting that close to the street and crosswalk, it is very likely that that the pedestrian is trying to cross. A person that is just lingering at the corner for other reasons, will typically not step that close towards the street. The three feet would also be large enough of an area to accommodate a wheelchair or a person with a walker or stroller.

The second amendment emphasized that a motorist turning into or out of an alley, driveway or similar access has to yield to any pedestrian or bicyclist on the sidewalk.

The third amendment introduced a local version of our state's "White Cane Law" that protects people that use a white can or service dog. Drivers have to yield to such pedestrians, no matter where they are.

Rectangular Rapid Flashing Beacons

In early October, Springfield Public Works equipped three neighborhood crosswalks with Rectangular Rapid Flashing Beacons, also known as RRFBs. The new signals are pedestrian-activated devices that can be easily seen by drivers from longer distances, providing more time for drivers to slow down and yield.

Three sets of RRFBs were installed at crosswalks located on Blackman Road across from Dan Kinney Park, Walnut Lawn and Broadway Avenue and at Grant Avenue and Calhoun Street. The effort also includes an educational outreach to drivers and pedestrians, so they each know what to do. The program was successful: before and after studies show that the pedestrian-activated beacons have significantly increased driver compliance at these crosswalk locations.

TRANSPORTATION ALTERNATIVES PROGRAM (TAP) FUNDED PROJECTS

Designs for the following projects were finalized and approved, with contractor bids approved in late 2020. The projects are funded primarily through federal Transportation Alternatives Program (TAP) funding through the Ozarks Transportation Organization, with construction anticipated in 2021:

Fassnight Trail Improvement – 1,200 linear feet of shared-use path 10 feet wide on Bennett Street from Jefferson Avenue to Kimbrough Avenue and from Holland Avenue to Clay Avenue. Construction anticipated in 2021.

Luster Avenue Sidewalk – 2,711 linear feet of 5-foot-wide sidewalk from Seminole Street to Sunset Street. Construction in 2021.

Harvard Avenue Sidewalk – 1,945 linear feet of 5'-foot-wide sidewalk from Swallow Street to Aladdin Street. Construction in 2021.

Galloway Trail Reconstruction – 2,694 linear feet of trail replacement with 10-feet-wide concrete trail along Lone Pine Avenue from Republic Road to Barton Street. Construction in 2021.

Greenwood and Lone Pine – A new traffic signal will be added at Greenwood and Lone Pine along with a crosswalk. Sidewalk will be added along the east side of Lone Pine to Covington and a 10-foot shared-use path will connect to the existing greenway trail to the east. Construction in 2021.

Fassnight Trail Extension Clay to Brookside – 1,600 linear feet of new 10-foot-wide shared-use path from Clay Avenue to Brookside Street. The project includes a pedestrian bridge that will connect pedestrians to Brookside, the new trail, and Springfield Art Museum.

2020 CITY-WIDE CRASH DATA

Traffic Engineering continues to record, track, and evaluate crash data throughout Springfield. Traffic Engineering also addresses concerns with parking, speeding, and neighborhood issues throughout the City. In 2020, Traffic Engineering was able to partner with several neighborhoods to improve signing, deploy speed radar boards, and assist with traffic studies to better understand their needs. One example was reconfiguring stop signs in the Woodland Heights Neighborhood to better accommodate traffic volumes.

Traffic crash data in 2020 is an interesting anomaly due to COVID-19 restrictions changing driver habits and common routes. While 2020 saw an overall decrease in crashes, nationwide severe or fatal crashes increased.

Crashes involving pedestrians	68
Crashes involving bicycles	43
Crashes involving fixed objects	657
Rear-end crashes	1,710
Angle Crashes	1,561
Side swipes	540
Head on crashes	175
2020 TOTAL CRASHES	**4,950**

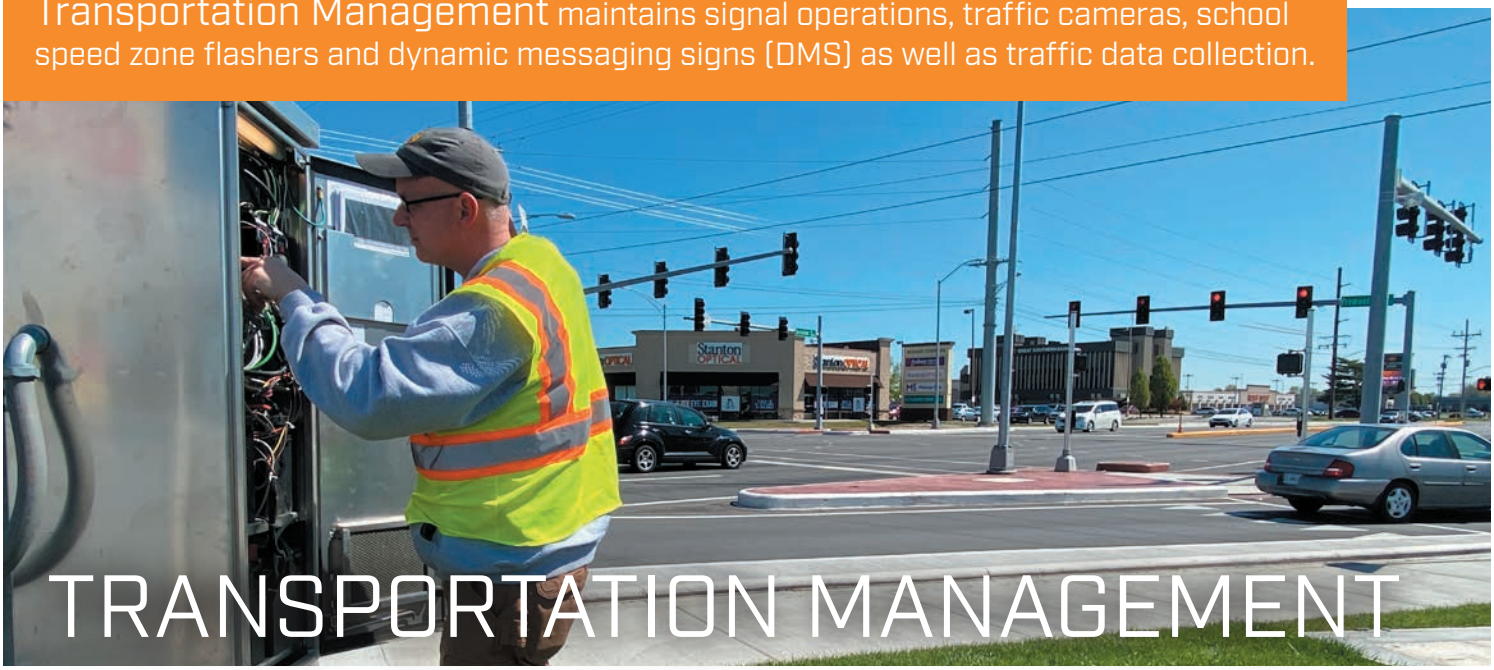
TOTAL ROADWAY FATALITIES:

2020:	28
2019:	14
2018:	17
2017:	19
2016:	18

FATALITIES BY TYPE:

Motorists:	10
Motorcycle:	13
Pedestrian:	5
Bicyclist:	0

Transportation Management maintains signal operations, traffic cameras, school speed zone flashers and dynamic messaging signs (DMS) as well as traffic data collection.



TRANSPORTATION MANAGEMENT

Public Works partners with the Missouri Department of Transportation to actively manage traffic flow throughout the Springfield-area roadway network through continuous traffic monitoring, traffic incident coordination, traveler information, and operation of the cooperative traffic signal system to improve mobility, enhance safety and maintain reliability.

>> 164 closed-circuit or "CCTV" cameras covering 160 miles of freeway, arterial & secondary streets.

>> 104 WiFi sensors capable of collecting data on travel times via mobile devices.

>> 47 dynamic messaging signs (DMS).

>> 103 school speed zone flashers.

>> Traffic devices are connected by 123 miles of fiber optic cable and 32 miles via wireless communications.

FIBER OPTIC CABLE NETWORK EXPANSION

The Transportation Management Division operates and maintains a multi-jurisdictional fiber optic communications network throughout the region with the Missouri Department of Transportation (MoDOT). The two agencies are working to expand the fiber optic network an additional 13 miles through separate agreements with Missouri Network Alliance, LLC, otherwise known as Bluebird Network. The agreements provide for the sharing of space in underground conduits along various corridors throughout the city including portions of Barnes Avenue, Battlefield Road, Blackman Road, Campbell Avenue (City and MoDOT), Cedarbrook Avenue, Cherry Street, Chestnut Expressway (MoDOT), Division Street, Glenstone Avenue (MoDOT), Jefferson Avenue, Kearney Street (MoDOT), Primrose Street, Republic Road, Sunshine Street, and Walnut Street.

BATTERY BACKUP SYSTEMS

City crews began installing battery backup systems (BBS) that provide uninterrupted backup power to traffic signals during power fluctuations or outages from the utility service, whereby enhancing intersection safety, reducing delay to motorists, and improving overall reliability of our signal system. Installation of BBS units will provide a reduction in overtime personnel expenses as crews will be responding less frequently to outages or signals in flash. City Council authorized the use of federal funds toward the purchase of BBS equipment to be installed at all City-maintained traffic signals.

TRAFFIC INCIDENT RESPONSE

24,227 Traffic incidents reported and posted to ozarkstraffic.com

7,455 Incidents confirmed by TMC via CCTV camera system

DMS MESSAGES

69 Incident-related messages posted per month.

32 Maintenance or construction related messages posted per month.

SIGNAL SHOP

140 City Maintained Traffic Signals

130 MoDOT Signals

270 TOTAL TRAFFIC SIGNALS

STREET OPERATIONS

Street Operations is responsible for maintenance of streets and stormwater drainage infrastructure as well as emergency work such as snow removal and flooding response.

STREET OPERATIONS MAINTAINS:

- > 1,770 lane miles of streets
- > 63 vehicle bridges
- > 6 pedestrian bridges
- > 640 miles of sidewalk
- > 544 stormwater grates
- > 1,090 service requests received for street work
- > 12.5 miles of brick sidewalk
- > 4.6 lane miles of alleyways

Public Works Street Operations is a maintenance- and project-driven division. Street Operations mixes in-house work with contracted work to perform core functions, such as filling potholes, rehabilitating roadway surfaces, maintaining flow in stormwater channels, repairing trip hazards in sidewalks, patching utility cuts, and completing various projects. During the winter and severe weather events, the division will stop project activities and road maintenance to address emergency work such as snow removal and flooding response.

PUBLIC WORKS PAVEMENT MAINTENANCE OVERVIEW

Public Works Street Operations utilizes multiple pavement management methods to repair, maintain and extend the life of City streets. These maintenance programs are funded primarily through the major street resurfacing rehabilitation program of the voter-approved 1/8-cent Transportation and 1/4-cent Capital Improvement Sales Taxes. An appropriate rehabilitation method is chosen to match the type of deficiency detected, such as asphalt mill and overlay, chip and seal, crack seal, microsurfacing, diamond grinding and concrete street repair.

113 TOTAL LANE MILES OF CITY STREETS WERE REHABILITATED IN 2020.

DIVISIONS TEAM UP ON NEW EMPLOYEE PARKING LOT AT CENTRAL AND BOONVILLE

In mid-summer, Street Operations crews were involved in a project to construct a new employee parking lot on the southwest corner of Central Street and Boonville Avenue. The City hired a contractor to demolish three buildings previously acquired from Greene County. Following demolition, Street Operations crews conducted grading work and constructed improved sidewalks, curb and gutter. A contractor was hired to apply new asphalt paving.

As the City continued its focus on quality of place, the project also focused on incorporating landscaping elements, with Public Works Grounds crews installing several landscaping beds and irrigation in preparation for various plantings to take place in early 2021.

Safety was an important consideration of the project. Additional lighting was installed in the parking lot for improved safety for citizens and employees. Street Operations also worked alongside the Traffic Engineering division to design and install a new mid-block crosswalk across Boonville Avenue located near the southwest corner of the Busch Municipal Building (near the loading dock).

The Boonville and Central parking lot project and demo of buildings was funded through the City's General Fund.

MAINTENANCE & REPAIRS

COMPLETED IN 2020:

- Asphalted 37 lane miles of roadway.
- Microsurfaced 46.45 lane miles of roadway.
- Cleared stormwater grates of debris and blockages 1,183 times.
- Regularly checked sinkholes, waterways under bridges, detention ponds, and completed biannual bridge inspections.
- 5,111 potholes repaired.
- Maintained 7 lane miles of alleyways.
- Completed maintenance on 5 sinkholes.
- Completed sidewalk grinding to 45 panels.

STORMWATER & DRAINAGE MAINTENANCE

- Received 127 service requests for drainage and flooding issues. Street Operations crews assess reports of flooding on a residential property or business and respond by cleaning out ditches, inlets or grates, unblocking culverts, clearing debris from bridges and pumping excess water from sinkholes.
- One mile of ditching cleared of sediment and debris.

SNOW REMOVAL

- 650 travel lane miles are designated for plowing.
- 19,500 average lane miles plowed or treated per year.
- 2,042 average tons of salt used per year.

Winter 2020 response:

- Crews mobilized for 10 snow/ice events.
- 1,700 tons of salt spread.

UTILITY CUTS

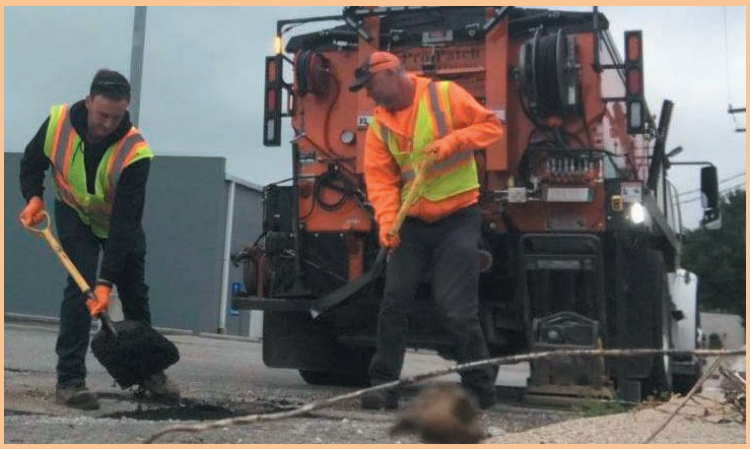
Street Operations completes the final repairs to the street upon completion of any service to underground utility or communications lines. A company must request a permit and reimburses the City for necessary repairs.

- 1,309 utility cut permits completed.

PANDEMIC TRAFFIC REDUCTIONS PROVIDE PAVEMENT MAINTENANCE OPPORTUNITY

The reduction in traffic during the COVID-19 pandemic afforded Public Works crews and contractors a unique opportunity to conduct roadway maintenance faster, safer and with much less impact to businesses and the traveling public.

Twelve lane miles of pavement were rehabilitated in downtown Springfield during the height of the shutdown in the spring. Pavement overlay contracts were accelerated in order to take advantage of the reduction in traffic and parking needs, thereby reducing the impact to businesses in one of the City's busiest areas.



PLOWING & POTHOLES

Snow plowing and pothole repair are two basic concepts that have a tremendous impact on our community. In a 2019 citywide transportation survey, citizens collectively responded that the condition of public streets was the top priority for the community. Street Operations is focusing on assuring that these basic needs are addressed in a timely manner. The City contracted with Infrastructure Management Systems (IMS) in 2019 to update pavement condition indexes for the more than 1,700 lane miles of City streets. This information is used along with several other factors to prioritize street overlays and micro-surfacing to provide the greatest benefit in the areas of need.

STREET OPERATIONS CONDUCTS 3-MONTH UTILITY CUT REPAIR BLITZ

In 2020, shifting work responsibilities and crew shortages due to COVID-19 caused a backlog of nearly 700 utility cut repairs.

Street Operations is in charge of the final repairs to City streets following any service to underground utility or communication lines. A company must request a permit and reimburse the City for these repairs. Approximately 55-75 of these permits come through the division each month.

In an effort to catch up and help quickly recover funding provided through utility cut permit fees, Street Operations conducted a three-month "utility cut blitz" in the fall, focusing crews division-wide on completing more than 450 of these necessary repairs.

"This was a great way to help get our numbers down to a more manageable amount for our utility cut crews," said Street Operations Supervisor Dan Jessen. "It was great to see everyone band together to help out a workgroup in need and accomplish a common objective."

PUBLIC GROUNDS

Public Grounds is responsible for the design, planning, planting and management of vegetation along city rights-of-way, facility grounds and beautification projects within Springfield.

RIGHT-OF-WAY & WATERWAY MAINTENANCE:

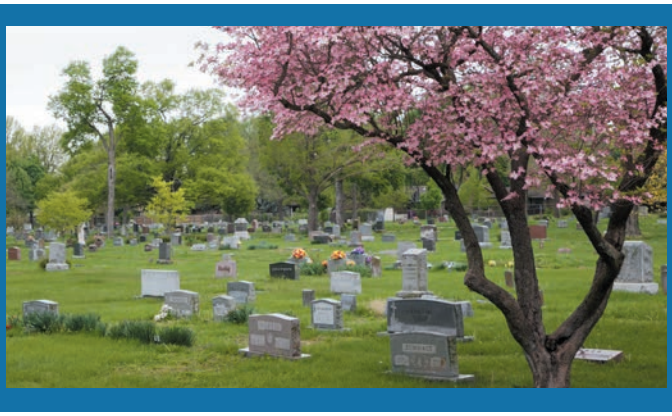
The Public Grounds division conducts cleaning, mowing, debris removal and general maintenance of City rights-of-way and waterways (detention basins, sinkholes, channels and ditches).

- 5,990 lane miles of streets cleaned, resulting in 2,411 tons of debris collected.
- 7,327 acres of roadside mowed and 48 tons of vegetative debris collected.
- 3,468 acres of City-owned lots mowed.
- 900 acres of waterways mowed.
- 746 acres of flow lines cleared.

TREES AND LANDSCAPING:

The City cares for over 20,000 public trees, 25 acres of landscaped street medians and parkways, and 65 acres of City facilities and other properties.

- 560 general reforestation plus 357 NeighborWoods trees planted.
- 678 trees removed.
- 4,952 trees pruned.
- 2,838 tons of debris collected with 1,342 tons of that material being recycled
- 2.2 acres of landscape beds maintained.



HAZELWOOD CEMETERY:

Springfield's Hazelwood Cemetery was opened in 1867 and, at 60 acres, is the largest city-owned cemetery in the state with over 44,000 grave spaces. In addition to maintaining the grounds, the Public Grounds division conducts lot sales and performs burial services.

GENERAL SERVICES

General Services is responsible for repair and maintenance of all City buildings and vehicles, as well as construction and design of new facilities. Internal maintenance services such as these help protect and extend the life of City facitilies and property.

FACILITY MAINTENANCE

Facilities Maintenance is responsible for the administration and maintenance of all City buildings and facilities.

>> Maintains approximately 98 publicly owned City buildings on 43 sites

>> 10,000 annual preventive maintenance and requested work orders generated.

>> Maintain and inspect 80 City/County outdoor early warning storm sirens sites

>> Interior remodels and storage cabinetry replacements.

FACILITY DESIGN & CONSTRUCTION

Facility Design and Construction is responsible for the design of construction improvements to City facilities.

PROJECTS COMPLETED OR UNDER WAY IN 2020:

- ✔ Springfield Mill & Lumber Police Exterior Building Envelope
- ✔ Heer's Car Park Maintenance
- ✔ College Station Car Park Maintenance and Repairs
- ✔ Municipal Facilities Demolition
- Demolition and Construction - Fire Station #4
- New Fire Station #13
- Demolition and Construction - Fire Station #7
- Fire Station #10 Renovation
- Landfill Improvements
- Wastewater Treatment Plant Laboratory Improvements

LEVEL PROPERTY TAX PROJECTS PROGRESS IN 2020

Renewed in 2017, Springfield's Level Property Tax generates about $8.5 million a year and is used to primarily fund projects via issuance of debt, with bonds issued and paid off over multiple years. Revenue collected from the City's 27-cent property tax has funded major capital improvements for many years, without increasing the tax rate.

Capital needs have long been a focus of the Level Property Tax. The 2017 project package included a variety of facility upgrades and new construction which are being managed through the Facility Design and Construction division of Public Works.

Fire Station Designs and Parking Lot Maintenance

In 2020, the design phases of three new fire stations were in full production. The City's intent was to begin with the demolition and construction of Fire Station #4 located at 2423 N. Delaware Avenue. This original two-story design bid in October 2020; however the bids exceeded the approved budget. The design consultants, Facility Design & Construction staff and Fire Department staff worked together to redesign a single-story design reducing the square footage by approximately 2,000 square feet and implementing various other value engineering items that still met the needs and goals originally established.

Level
PROPERTY TAX

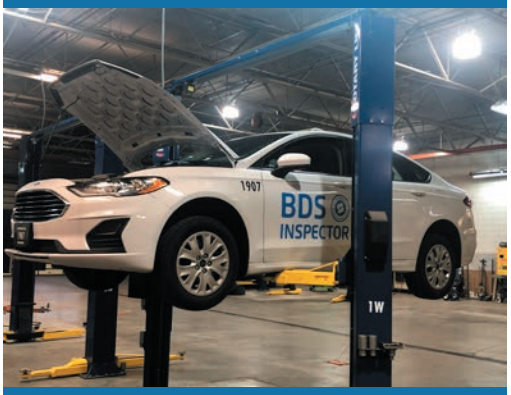
The design of the renovation of Fire Station #10 (2245 E. Primrose Street) also began. The project included upgrades to the existing fire station, including electrical and mechanical upgrades, a new full station generator, roof repairs, select window and door replacements, interior finish upgrades and providing a gender-neutral facility to meet the needs of all firefighters.

Fire Station parking lot maintenance at Fire Stations #1, #5, #6, #8 and #11 also began in 2020. Various parking lot maintenance scope of work is included such as concrete repairs, crack seal, spray seal, mill and overlay and new striping.

New Animal Shelter Site Analysis

The City partnered with Greene County to complete a site analysis exercise for the new Animal Shelter site at 3303 W. Division Street that confirmed the location would accommodate the needs of a new animal shelter. Outreach to the neighborhood was conducted to inform neighbors and gather potential concerns with the planned location. A programming exercise was conducted with the Springfield-Greene County Health Department to further refine the operational and programmatic needs of the new shelter.

SERVICE CENTER



The Service Center is responsible for the administration, maintenance and repair of not only Public Works vehicles and equipment, but also that of the Springfield Police Department, Fire Department and Environmental Services, among others.

>> 2,058 preventive maintenance services performed annually.

>> 3,642 work orders completed annually.

>> 1,452 TOTAL UNITS maintained by the Service Center, including:

178 sedans
178 SUVs
192 pickup/light-duty
75 medium-duty (box trucks, flatbeds)
118 heavy-duty (dump trucks, etc.)
179 tractor/mower/excavating
528 non-self propelled (trailers, generators, etc.)

TRANSPORTATION ENGINEERING

Transportation Engineering manages public improvements from concept through construction, including streets, intersections, streetscapes and bridges. It is also responsibile for right-of-way acquisitions for public uses, surveying public property and production and maintenance of City maps and drawings.

BATTLEFIELD & FREMONT INTERSECTION AND ROADWAY WIDENING PROJECT

This project added turn lanes on Battlefield Road, an additional northbound through lane on Fremont Avenue, upgraded the traffic signals and added ADA-compliant sidewalks and ramps. Fremont Avenue was also widened to five lanes between Battlefield Road and Sunset Street. The project included an additional northbound lane, a multi-use side path on the west and sidewalks on the east, storm water drainage improvements, gas and water renewals and traffic signal upgrades at the mall entrance.

Design Consultant – CJW Transportation Consultants
Contractor – Hartman & Company
Construction Cost - $3,151,000

2020 COMPLETED PROJECTS:

Cherry Street Widening Project

This project widened Cherry Street to three lanes between Barnes Avenue and Oak Grove Avenue. The project included the addition of bike lanes, sidewalks, stormwater drainage infrastructure, curb and gutter, gas and water renewals, and traffic signal upgrades at the intersection of Oak Grove Avenue and Cherry Street.

Design Consultant – Great River Engineering
Contractor – Hamilton and Dad
Construction Cost - $2,079,000

West Meadows Trail

The Jordan Creek Trail at West Meadows is part of the overall master plan for redevelopment of the Jordan Creek Valley in downtown Springfield. The trail is also adjacent to Route 66 and the Birthplace of Route 66 Roadside Park. This trail project created a use for open space that had been part of an environmental clean-up project and is part of an overall plan to facilitate the redevelopment of a drainage ditch into a living urban stream with streamside amenities.

Design Consultant – Olsson
Contractor – Emery Sapp & Sons
Construction Cost - $440,000

DESIGNS FOR UPCOMING CONSTRUCTION:

Central Street Phase 2 - Benton to Clay

This project will convert Central Street to a complete street providing a system for vehicles, bicycles, and pedestrians, encouraging all forms of transportation. The project will add a multi-use path on the north side and a sidewalk on the south side. Intersection improvements will be made at Central Street and Drury Lane.
Design Consultant – CJW Transportation Consultants

Jefferson Avenue Footbridge

The Jefferson Avenue Footbridge was built in 1902 and is on the National Register of Historic Places. The bridge was closed in 2016 due to safety concerns related to deterioration and damage discovered during a routine inspection. The improvements planned include rehabilitation of the bridge truss, addition of an elevator/lift and stairs on both the north and south sides of the bridge, repainting the entire bridge and adding new lighting elements.
Design Consultant – Great River Engineering

Arterial Overlay and ADA Improvements

This project will include a street overlay and associated ADA improvements for portions of National Avenue, Battlefield Road, and Sunshine Street. The improvements include a new street surface, pedestrian signal improvements and upgrades to the ramps at many of the intersections.
Design Consultant – Toth & Associates

Phelps Street Streetscape

This project continues streetscape enhancements in the downtown area along Phelps Street between Boonville Avenue and Robberson Avenue. The project will include ADA compliant sidewalks, stormwater improvements, lighting and landscaping enhancements and gas and water renewals.
Design Consultant – Olsson

Republic Road - Fairview to Chase Driveway

This project will provide improvements to upgrade the traffic signals at the intersections of Campbell Avenue and Republic Road and Republic Road and the driveway for Chase as well as additional turn lanes at Campbell Avenue and Republic Road. The project will widen Republic Road from three lanes to five and includes the addition of bike lanes to Republic Road, sidewalk and ADA upgrades, stormwater improvements, and better integration with the Campbell Avenue and James River Freeway interchange.
Design Consultant – Crawford Murphy & Tilly

Grant Avenue PARKWAY

The Grant Avenue Parkway project will create an off-street pedestrian and bicycle pathway along Grant Avenue between Sunshine Street and the Wonders of Wildlife National Museum and Aquarium and College Street with a loop through downtown Springfield. The project will include bicycle and pedestrian friendly facilities, various traffic calming improvements, bridge enhancements, utility upgrades, fiber connectivity and additional crossing and intersection improvements. This will be the City's first project utilizing the design-build project delivery method.

Visit www.grantavenueparkway.com.

Owner's Representative – Crawford Murphy & Tilly

STORMWATER ENGINEERING

STORMWATER ENGINEERING works closely with the Water Quality division of the Department of Environmental Services to provide programs, improvement projects and services to meet the stormwater management needs of the community, reduce potential flood hazards and protect area waterways.

2020 COMPLETED PROJECTS:

✔ Linden and Latoka

This project consists of channel and underground stormwater improvements to relieve flooding to streets and private property and replace an old channel comprised of dilapidated railroad tie and gabion basket retaining walls with an underground stormwater system. Construction began in June and was completed in December of 2020.

Designed by: Toth & Associates, Inc.
Constructed by: Hartman & Company, Inc.
Construction Cost: $328,755

✔ Ravenwood South Phase II

This project consists of channel improvements downstream of the regional detention basin that was enlarged in Phase I. These improvements will increase conveyance to reduce flooding of the residential properties and help stabilize a channel that has experienced significant erosion due to upstream development. Construction began in the summer of 2019 and was completed in June 2020.

Designed by: Olsson, Inc.
Constructed by: Hunter Chase & Associates, Inc.
Construction Cost: $753,592

UNDER CONSTRUCTION:

Beechwood Heights Phase I

This project involves construction of a new underground stormwater system to relieve flooding to streets and private property in the Beechwood Heights Subdivision. Construction began in August 2020 and is estimated to be complete by June 2021.

Designed by: HDR Engineering, Inc.
Constructed by: Hamilton & Dad, Inc.
Construction Cost: $1,210,280

COMING SOON:

Fassnight Creek by the Art Museum

The project objective is to naturalize a portion of Fassnight Creek immediately south of the Springfield Art Museum and provide floodplain improvements for the museum and surrounding residential properties. The project includes removal of the existing concrete channel, removal of the Kings Avenue Bridge, sanitary sewer realignment and reconfiguration of Brookside Drive. Construction began in March 2021 and is anticipated to be complete by April 2022.

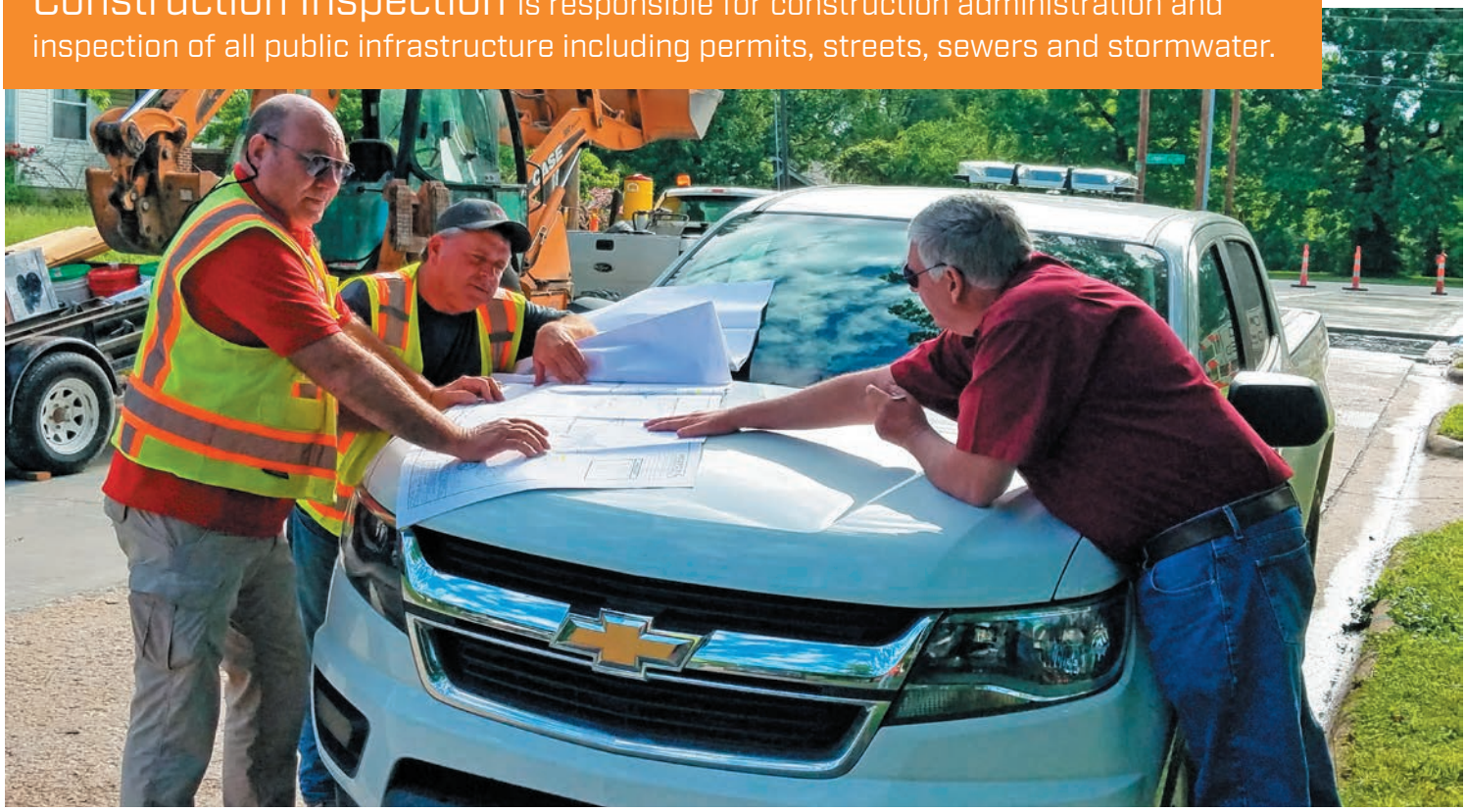
Designed by: HDR Engineering, Inc.
Constructed by: Hartman & Company, Inc.
Construction Cost: $2.3 million

Pickwick and Lombard

The project's objective is to reduce flooding in the Rountree neighborhood beginning at the intersection of South Fremont and East Lombard and extending to South Weller and East Madison while also relieving flooding along Lombard St. from Fremont to Pickwick. Historic flooding records indicate that the two most common factors are water in basements and yard/street flooding. Inlets and an underground storm drain system will be constructed to reduce flooding. Construction began in April 2021 and is anticipated to be complete by October 2021.

Designed by: Crawford, Murphy & Tilly, Inc.
Constructed by: Hamilton & Dad, Inc.
Construction Cost: $1.1 million

Construction Inspection is responsible for construction administration and inspection of all public infrastructure including permits, streets, sewers and stormwater.



CONSTRUCTION INSPECTION

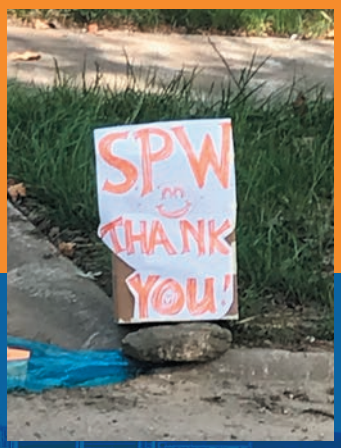
In 2020, Construction Inspection reviewed plans for and provided construction administration and inspection for over $3 million of new public infrastructure added to the City as a result of private development in addition to inspection of $10.2 million in City improvement projects and $4.5 million in street maintenance contracts.

103 PROJECTS WERE CONSTRUCTED AND ACCEPTED BY THE INSPECTION DIVISION IN 2020.

The Inspection staff also coordinated traffic control, provided guidance, and performed inspections on 1,495 excavation permits, 179 new driveway permits and 62 sidewalk permits. As a new addition to 2020, Inspection spent over 420 hours inspecting City assets affected by the new SpringNet fiber project being constructed throughout town.

Coordination of these permits ensures private work does not adversely affect public property, traffic flow and public events.

CITY OF
Springfield
PUBLIC WORKS



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VISIT:

840 BOONVILLE AVENUE
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ACCREDITED AGENCY
A • P • W • A

The APWA accreditation program recognizes governmental agencies that go beyond the requirements of the management practices established nationally in the public works industry.

The APWA accreditation indicates that Public Works staff are dedicated to concepts of continuous improvement and in-depth self-assessment of department policies, procedures, and practices.